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1112, 3109.3309

23347 S/055/61/000/006/034/063  
AC01/A101

AUTHORS: Azarov, K.F., Balandina, V.V., Grechanova, S.B., Lyudskarskiy, V.A.

TITLE: The structure and properties of iron-containing glasses

PERIODICAL: Referativnyy zhurnal. Fizika, no. 6, 1961, 224, abstract 6D271 (V sb. "Steklobrazn. sostoyaniye", Moscow-Leningrad, AN SSSR, 1960, 365-368, Discus. 377 - 379)

TEXT: The authors investigated magnetochemical and other properties of boron and boron-free glasses and enamels containing iron. On the basis of data obtained, the authors drew conclusions on the valent and coordination states of  $Fe^{2+}$  and  $Fe^{3+}$  ions and their position in the structural skeleton of the glass. The conclusion was arrived at that iron in boron glasses and enamels was mainly present in the form of  $Fe^{2+}$  cations weakly bound with the glass structure. In boron-free glasses, Fe is present mainly in the trivalent state in the form of  $FeO_3$  and  $FeO_4$  groups which are parts of the glass structural skeleton and strengthen the latter.

T. Veynberg

[Abstracter's note: Complete translation]

Card 1/1

TIMOSHEV, V.G.; PETROV, K.A.; RODIONOV, A.V.; BALANDINA, V.V.; VOLKOVA, A.A.;  
YEL'KINA, A.V.; MAGNIBEDA, Z.I.

Extraction capacity of neutral, oxygen-containing organic substances.  
Radiokhimiia 2 no.4:419-425 '60. (MIRA 13:9)  
(Extraction (Chemistry))

PETROV, K.A.; SHIVCHENKO, V.B.; TIMOSHEV, V.O.; MAKLYAYEV, F.A.; FOKIN,  
A.V.; RODIONOV, A.V.; BALANDINA, V.V.; YEL'KINA, A.V.; MAGNIBEDA,  
Z.I.; VOLKOVA, A.A.

Alkyl phosphonates, diphosphonates, and phosphine oxides as  
extracting agents. Zhur.neorg.khim. 5 no.2:498-502  
F '60. (MIRA 13:6)

(Phosphonic acid) (Phosphine oxide)  
(Extraction(Chemistry))

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27127

S/080/60/033/008/020/022/XX  
D213/D305

AUTHORS: Azarov, K.P., Balandina, V.V., Lyutsedarskiy, V.A.

TITLE: Magnetochemical investigations of iron-containing glasses (enamels)

PERIODICAL: Zhurnal prikladnoy khimii, v. 33, no. 8, 1960,  
1900 - 1901

TEXT: In the present work the authors studied the magnetic properties of boron and boron-free glasses (enamel primers for steel) to establish the relation between the position of iron and the properties of the glass, an important factor in the physical chemistry of enamelling. The glasses examined were heated for 4 hours with 5 % ferric oxide at 500 - 1000°C and quenched in water to fix the position of iron at a given temperature. The powdered glass was sieved through a 10,000 openings/cm<sup>2</sup> sieve and its magnetic susceptibility determined by Guy's method. To eliminate the presence of ferro-magnetic admixtures in the enamels (glasses) all the ex-

Card 1/4

Magnetöchemical investigations ...

27127  
S/080/60/033/008/020/022/XX  
D213/D305

periments were conducted in magnetic fields of 250-400 oersteds. The specific susceptibility was then calculated from

$$x_2 = \frac{x_1 l_2 m_1}{\Delta p_1 l_1 m_2} p_2 \quad (1)$$

where  $x_1$  and  $x_2$  - specific magnetic susceptibilities of blank and test samples,  $m_1$  and  $m_2$  - masses of powder in grams,  $\Delta p_1$  and  $\Delta p_2$  - change in weight in grams,  $l_1$  and  $l_2$  - heights of powders in ampoules in cm. The blank used in the experiments was made up of Mohr's salt. The magnetic moments of iron for boron and boron-free enamels increase at 500-700°C which in the absence of ferromagnetic material is due to the rupture of the crystalline lattice of  $Fe_2O_3$  and the gradual introduction of iron into the glass structure. This assumption agrees with the findings of the divergence between Weiss constants for iron-containing enamels (-500°K) and for

Card 2/4

27127

S/080/60/033/008/020/022/XX  
D213/D305

Magnetochemical investigations ...

$\text{Fe}_2\text{O}_3$  (-2000°K) which indicates a weakening of the bonds between iron atoms. In the 500 - 700°C interval boron-free enamel differs from boron enamel in the magnetic moment value which may be attributed to the relatively high content of  $\text{Fe}^{3+}$ . With a further temperature increase, from 700-1000°C, an alternating increase and decrease of magnetic moments of iron is observed and at 850-950°C a maximum value of 6.05 Bohr magnetons is obtained (theoretical value for  $\text{Fe}^{3+}$  is 5.92). This fact establishes a similarity in the action of boron and boron-less enamel melts on the position of iron at given temperatures. There are 1 figure and 9 references: 3 Soviet-bloc and 6 non-Soviet-bloc. The references to the 4 most recent English-language publications read as follows: H. Cole, J. Soc. Glass Techn., 35, 162, 25-40, 1951; J. De Jong, J. Soc. Glass Techn., 38, 181, 57T-83T, 1954; A.E.M. Abou-El-Azm, J. Soc. Glass Techn., 38, 181, 101T-145T, 1954; J.M. Stevels, Proceedings Intern. Comm. on glass 1, 71, 1954.

Card 3/4

27127

Magnetochemical investigations ... S/080/60/033/008/020/022/XX  
D213/D305

ASSOCIATION: Laboratoriya emaley Novochoerkasskogo politekhnicheskogo instituta im. Sergo Ordzhonikidze (Enamel Laboratory of Novochoerkask, Polytechnic Institute im. Sergei Ordzhonikidze) X

SUBMITTED: December 14, 1959

Card 4/4

AZAROV, K.F.; BALANDINA, V.V.; CHISTOVA, Ye.M.; RODIONOVA, A.V.

Crystallization of titanium phosphate enamels. Izv.vys.ucheb.zav.:-  
khim.i khim.tekh. 4 no.4:647-650 '61. (MIRA 15:1)

1. Novocherkasskiy politekhnicheskiy institut imeni Ordzhonikidze,  
laboratoriya emaley.  
(Enamel and enameling) (Titanium phosphate)



30202

S/080/61/034/011/015/020  
D228/D301

15.2510

AUTHORS: Azarov, K.P., Balandina, V.V., and Lyutsedarskiy, V.A.

TITLE: Magneto-chemical investigations of glasses of the  
system  $\text{Na}_2\text{O} - \text{P}_2\text{O}_5 - \text{V}_2\text{O}_5$

PERIODICAL: Zhurnal prikladnoy khimii, v. 34, no. 11, 1961,  
2560 - 2562

TEXT: The authors studied the magneto-chemical properties of  $\text{Na}_2\text{O} - \text{P}_2\text{O}_5 - \text{V}_2\text{O}_5$  glasses with the aim of tentatively assessing the state of V in such a system. Research into the properties of glasses of the systems  $\text{V}_2\text{O}_5 - \text{P}_2\text{O}_5$ ,  $\text{V}_2\text{O}_5 - \text{P}_2\text{O}_5 - \text{BaO}$ , and  $\text{V}_2\text{O}_5 - \text{P}_2\text{O}_5 - \text{Na}_2\text{O} - \text{BaO}$  suggests that V plays an analogous role to P in these systems, and that compounds of V with O should be excluded from the number of glass-forming oxides. The glasses were prepared by heating batches of  $\text{Na}_2\text{CO}_3$ ,  $(\text{NH}_4)_2\text{HPO}_4$ , and  $\text{V}_2\text{O}_5$  in corundum crucibles at  $900 - 1200^\circ$ , after which the mixtures were first air-  
Card 1/3

Magneto-chemical investigations ...

30202  
S/080/61/034/011/015/020  
D228/D301

cooled and then pulverized. The magnetic susceptibilities of the powders was determined by the Gouy method, the magnetic moment  $\mu$  of V in the glasses being computed from the formula:

$$\mu = 2.83 \sqrt{\frac{100}{p}} \chi AT$$

where p is the V content of the glass,  $\chi$  - the specific magnetic susceptibility, A is the atomic weight of V, and T is the absolute temperature. These values were compared with the theoretical magnitudes for the effective magnetic moment of different V ions, calculated from

$$\mu = \sqrt{n(n+2)}$$

where n is the number of uncoupled electrons. For most of the glasses with a Na<sub>2</sub>O content of 40 - 55 mol. % the magnetic moment of V lies in the range 3.14 - 5.36 Bohr magnetons which indicates the predominance of ions with a valency of  $<5$  (V<sup>3+</sup> and V<sup>4+</sup>). In sections with a constant Na<sub>2</sub>O content the magnetic moment of V decreases - which corresponds to the rise in the relative concentration of V<sup>4+</sup> ions - as the V<sub>2</sub>O<sub>5</sub> content increases at the expense of P<sub>2</sub>O<sub>5</sub>.

Card 2/3

Magneto-chemical investigations ...

30202

S/080/61/034/011/015/020  
D228/D301

The authors found that at the highest concentration of  $\text{Na}_2\text{O}$  (50 - 55 mol. %) the experimental values of  $\mu$  exceed the theoretical values, owing to the presence of crystallization which was discovered in the glasses by microscopic and X-ray techniques. They hence conclude that this method may be used to detect the formation of a crystalline phase in V glasses. There are 3 figures, 1 table, and 12 references: 7 Soviet-bloc and 5 non-Soviet-bloc. The references to the English-language publications read as follows: K. H. Sun, J. Amer. Ceram. Soc. 30, 9, 277, 1947; E.P. Denton et al, J. Soc. Techn. 40, 194, 252, 1956; P.L. Bawton et al, J. Electrochem. Soc., 104, 4, 237, 1957.

ASSOCIATION: Novoherkasskiy polytekhnicheskiy institut, laboratoriya emaly (Enamels Laboratory, Novoherkassk Polytechnic Institute) X

SUBMITTED: January 20, 1961

Card 3/3

1 14050-03

BDS/EWP(q)/EWT(m) AFPTC/ASD Pq-4 NH

ACCESSION NR: AP3002696

8/0080/63/036/005/0969/0973

AUTHORS: Azarov, K. P.; Balandina, V. V.

TITLE: Analysis of the system Na sub 2 - P sub 2 O sub 5 - V sub 2 O sub 5 in vitreous state .

SOURCE: Zhurnal prikladnoy khimii, v. 36, no. 5, 969-973

TOPIC TAGS: vanadium, sodium, Na sub 2 O, glass, specific susceptibility, magnetic moment

ABSTRACT: Authors studied the effect of changes in Na<sub>2</sub>O content from 35 to 100 mol. % upon the system Na<sub>2</sub>O-P<sub>2</sub>O<sub>5</sub>-V<sub>2</sub>O<sub>5</sub>. Purpose of this study was to ascertain the possible positions of vanadium in glasses of the above system. In the first series of tests, the boundaries of the composition areas, glass-forming temperature, fusibility, chemical stability, specific susceptibility and magnetic vanadium moment in the glasses were determined. For determining the composition boundaries and glass-formation temperatures, the batches were melted in 5 ml. porcelain analysis boats inside of a silit-heated furnace. Experiments were carried out at temperatures from 800 to 1300C with 50 degree intervals. The glass samples intended for other tests were melted in 50 ml. corundum crucibles. The melted

Card 1/2

ACCESSION NR: AP3002696

2  
glasses were fast-dried in air. The degree of homogeneity and crystallization was ascertained by visual and microscopic observation. A ternary diagram was constructed which included  $\text{Na}_2\text{O}$  content from 35 to 60 mol. %. The largest amount of  $\text{Na}_2\text{O}$  with which vanadium glasses could be formed was 60 mol. %. The analyzed glasses are characterized by a high tendency to crystallization. The glasses which were the easiest to fuse were those with a 5 to 15 mol. %  $\text{V}_2\text{O}_5$  content. A further increase in  $\text{V}_2\text{O}_5$  content increases the refractoriness. In the glasses containing 35 to 55 mol. %  $\text{Na}_2\text{O}$ , the values of the magnetic vanadium moment were generally within the limits 3.14 to 5.36 Bohr magnetons. When the  $\text{Na}_2\text{O}$  content is constant and the  $\text{V}_2\text{O}_5$  content is increased at the expense of  $\text{P}_2\text{O}_5$ , the magnetic moment for vanadium is reduced. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Kafedra keramiki, stekla i emaley Novochoerkasakogo politekhnicheskogo instituta (Department of Ceramics, Glass and Enamels, Novochoerkassk Polytechnical Institute)

SUBMITTED: 24Nov61

DATE ACQ: 24Jul63

ENCL: 00

SUB CODE: CH, MA

NO REF SOV: 006

OTHER: 002

Cord 2/2

S/830/62/000/001/002/012  
E111/E192

AUTHORS: Timoshev, V.G., Petrov, K.A., Rodionov, A.V.,  
Balandina, V.V., Volkova, A.A., Yel'kina, A.V., and  
Nagnibeda, Z.I.

TITLE: Importance of the structure and physical state of  
extraction-solvent molecules

SOURCE: Ekstraktsiya; teoriya, primeneniye, apparatura.  
Ed. by A.P. Zefirov and M.M. Senyavin.  
Moscow, Gosatomizdat, 1962. 88-103.

TEXT: Taking the criterion of extraction ability as the  
distribution coefficient, and the ratio  $B$  (the number of hydrogen  
to the number of carbon atoms in the solvent), the authors study  
the distribution of uranyl, plutonium (IV), zirconium and niobium  
nitrates. The feed comprised 0.5 - 1 or 2 N aq. nitric acid  
solution. Extracting with orthoformates and phosphates the  
extractive ability falls with decreasing  $B$  values - steric  
hindrance playing an important part. With phosphonates the  
opposite relation holds - the water solubility of the lower  
homologues and their polymerization being important factors.  
Card 1/2

Importance of the structure and ...

S/830/62/000/001/002/012  
E111/E192

The extractive ability of phosphonates increases at the same time as the alkyl radicals become less electrophilic and the solvents less soluble; however, when the radicals become comparatively large, steric hindrances become decisive and extractive ability falls sharply in spite of reduced solubility. The same holds for phosphine oxides and amines. Further work to generalize these relations is contemplated. There are 15 figures.

Card 2/2

AZAROV, K. P.; BALANDINA, V. V.; LYUTSEDARSKIY, V. A.

"On the state of transition elements in glass structure."

report submitted for 4th All-Union Conf on Structure of Glass, Leningrad,  
16-21 Mar 64.



Country : USSR  
Category : Soil Science. Cultivation. Improvement.  
Erosion. J  
Abs Jour : RZhBiol., No 6, 1959, No 24665  
Author : Ivanov, P. K.; Balandina, Ye. I.  
Inst : -  
Title : Deep Plowing in the Southern Chernozems of  
the Regions beyond the Volga.  
Orig Pub : S. kh. Zavolzh'ya, 1958, No. 8, 28-30  
Abstract : No abstract.

Card : 1/1

BALANDINSKAYA, N. M.

Cand Med Sci - (diss) "Therapy of nonspecific chronic pneumonias by use of aerosols of antibiotics." Voronezh, 1961. 15 pp; (Ministry of Public Health RSFSR, Voronezh State Med Inst); 200 copies; free; (KL, 7-61 sup, 256)

KLIUCHNIKOV, Ivan Ivanovich; ARKHANGEL'SKIY, Andrey Sergeyevich; Prinyatiye  
uchastniye: VISOKOSOV, V.I., SOKOLOV, Yu.L., BALANDINSKIY, Ye.D.;  
SOSNOV, V.D., otv. red.; SILINA, L.A., red. izd-va; IL'INSKAYA,  
G.M., tekhn. red.

[Cutter-loaders PKG-3 and PKG-4] Prokhodcheskie kombainy PKG-3 i  
PKG-4. Moskva, Gos. nauchno-tekhn. izd-vo lit-ry po gornomu delu,  
1961. 174 p. (MIRA 14:8)

(Mining machinery)

BALANDIS, M.N.; MEL'NIKER, G.S.

The ESU-1 electronic level indicator. Biul.tekh.-ekon.inform.  
no.1:37-39 '59. (MIRA 12:2)  
(Liquid level indicators) (Electronic measurements)

SARDYUKOV, Mikhail Petrovich; BALANDYUK, A.V., red.; POD'YEL'SKAYA, K.M.,  
tekhn.red.

[The natural resources of Karelia must be utilized to serve the  
people] Prirodnye bogatstva Karelii na sluzhbu narodu. Petro-  
savodsk, Gos.isd-vo Karel'skoi ASSR, 1959. 65 p. (MIRA 12:11)  
(Karelia--Economic policy)

BALANDYUK, G.S., ~~tekhn.~~ tekhn.nauk; SIGALO, Ya.A.

Unified train sheets. Zhel.dor.transp. 43 no.11:87-89 N '61.  
(MIRA 14:11)

1. Nachal'nik sheleznodorozhnogo ~~zavoda~~ sekha metallurgicheskogo  
zavoda, g. Donetsk (for Sigalo).  
(Railroads—Management)  
(Railroads, Industrial)

BALANDYUK, G.S., kand.tekhn.nauk, dotsent

Systems of measuring the utilization of the rolling stock in the  
railroad transportation of industrial enterprises. Trudy MIIT no.143:  
104-111 '62.

(Railroads, Industrial)

(MIRA 15:7)

BALANDYUK, O.S., kand.tekhn.nauk, dotsent

Traffic capacity of interdependent track lines and classification  
points of industrial railroads. Trudy MIIT no.143:54-79 '62.  
(MIRA 15:7)

(Railroads, Industrial)



BALANDYUK, G.S., kand.tekhn.nauk, dotsent

Calculating the necessary number of bunched and single trains in a partly bunched train sheet in order to achieve the given traffic volume. Trudy MIIT no.168:188-195 '63. (MIRA 17:4)

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960  
Author : Spacu, P.; Radulescu, Elena; Vasilescu, Claudia;  
Balanel, Elena  
Inst : Not given  
Title : Separation and Determination of Manganese in  
Ferromanganese  
Orig Pub : An. Univ. "C. I. Parhon", Ser. stiint. natur.,  
1958, No 20, 69-77  
Abstract : Two methods were applied with improvements to  
the determination of Mn in ferromanganese  
under factory conditions: complexometric method  
(Pribil, R.; Horacek; Z. anal. Chem., 132,  
140 (1951)) and ion-exchange method (RZ Khim,  
No 6, 1955, No. 9697). In the 1st method the  
sample to be analyzed, containing 30-150 mg

Card 1/4

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

Mn, is treated with a concentrated  $\text{HNO}_3$  solution, neutralized with a NaOH solution until the appearance of weak opalescence; 25-30 ml 7% Complexone III solution (I), and 10 ml glacial  $\text{CH}_3\text{COOH}$  containing 1 g  $\text{Ca}(\text{CH}_3\text{COO})_2$  (to form a buffer) are added; 1 g  $\text{PbO}_2$  (to oxidize  $\text{Mn}^{+2}$  to  $\text{Mn}^{+3}$ ) is introduced; this is stirred (1.5 min.), filtered under vacuum, and the residue (excess  $\text{PbO}_2$ ) washed with water; the filtrate, containing all of Mn in the form of a Mn (III) complex, is titrated with 0.1 M solution of Mohr's salt. To prevent the decomposition of the Mn (III) complex, the analysis (after the addition of  $\text{PbO}_2$ ) should be conducted rapidly, (15 min.). The error of the method is -0.5%. In the 2nd

Card 2/4

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

method the cation exchange resin Amberlite LR-120 is used; 20% HCl solution (150 ml) is used for the elution of Mn. The resulting solution is neutralized with a concentrated  $\text{NH}_4\text{OH}$  solution, and Mn is determined by an indirect titration: an excess of 0.1 N solution of I [means (I)], 8-10 ml buffer solution (350 ml  $\text{NH}_4\text{OH}$  + 54 g  $\text{NH}_4\text{Cl}$ ) are added, and the excess of (I) is back-titrated with 0.1 N.  $\text{ZnSO}_4$  solution, using Eriochrome Black T as indicator. It was determined that the use of NaOH or KOH (instead of  $\text{NH}_4\text{OH}$ ) for the neutralization causes high results in the determination of Mn. This method is two times more accurate than the first one, but is more time-consuming; it is also necessary to separate

Card 3/4

RUMANIA / Analytical Chemistry. Inorganic Analysis.

E

Abs Jour : Ref Zhur - Khimiya, No 23, 1959, No. 81960

SiO<sub>2</sub> previously. After the separation of Mn, Fe in the solution is determined by a titration with permanganate (after reducing Fe<sup>3+</sup> to Fe<sup>2+</sup> with electrolytic Cd). -- B. Manole

Card 4/4

319.9

R/004/62/000/002/001/002

D014/D105

18.9500

AUTHORS: Roman, P., Rittenberg, V., Didiv, B., and Bălănel, E., (Bucharest)

TITLE: Production of high-purity silicon single crystals

PERIODICAL: Electrotehnica, no. 2-3, 1962, 41 - 52

TEXT: The article deals with the principles of pure silicon manufacture and investigations conducted by ICET - Institutul de cercetari electrotehnice (Electrotechnical Research Institute) on the production of high-purity silicon single crystals for transistors and rectifiers. The authors discuss the production of silicon bars by the reduction of trichlorosilane with hydrogen on a specially shaped tantalum wire, and the production of high-purity p-type silicon single crystals by the zone melting process and the single crystal seed drawing method. Described are a zone melting installation and a single crystal seed drawing installation, both made by ICET. Silicon bars, 300 mm long and 16 mm in diameter can be refined in the zone melting installation, supplying pure single silicon crystals with a resistivity of 30-300  $\Omega$ cm. The seed drawing installation was built for 150-gr silicon charges, but only 55-80-gr charges

Card 1/2

X

R/004/62/000/002/001/002  
D014/D105

Production of high-purity silicon .....

were subjected to the seed drawing process. The diameter of the seed was 5-6 mm, while the silicon single crystals obtained were 100-110 mm long and 18-25 mm in diameter, with a resistivity of 10-150  $\Omega$ cm. In a few exceptional cases, the single crystals had sections where resistivity exceeded 1,000  $\Omega$ cm. The results can be improved by increasing the purity of trichlorosilane and by using the method of decomposition on silicon. There are 18 figures and 1 table. The most important English-language reference reads as follows: W.G. Pfann: Trans. A.I.M.M.E., 197, 1952, 747.

ASSOCIATION: ICET

Card 2/2

BALANTSEVO, M.S.

Organisation of machinery repair in repair and supply stations.  
Mekh. sil'. hosp. 9 no.10:12-13 0 '58. (MIRA 11:10)

1. Glavnyy inzh. Novosandsharskoy remontno-traktornoy stantsii,  
Poltavskoy oblasti.  
(Poltava Province--Repair and supply stations)



ALEXIU, I., ing.; BALANESCU, C., ing.; CATUNEANU, V., ing. candidat in stiinte  
tehnice; DANILIUC, N., ing.; RUSU, N., ing.

Elementary commutation circuits with magnetic cores. Telecomunicatii  
7 no.1:12-18 Ja-F '63.

CATUNEANU, V., ing.; ALEXIU, I., ing.; DANILIUC, N., ing.; BALANESCU, C., ing.

Signaling devices with semiconductors for automatic telephone exchanges  
for institutional use. Telecomunicatii 7 no.2:69-74 Mr-Apr '63.

BALANESCU, E.

AGRICULTURE

Periodicals: REVISTA PADURILOR. Vol. 73, no. 11, Nov. 1958

BALANESCU, E. Mechanization is the way towards increase in productivity and lowering of costs in forest exploitation. p. 635.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, No. 2,  
February 1959, Unclass.

BALANESCU, G.

Coloring of food products.

P. 162 (REVISTA DE CHIMIE) (Bucharest, Rumania) Vol. 8, No. 3, Mar. 1957

50: Monthly Index of East European Accessions (MEAI) 1/2 Vol. 7, No. 5, 1958

**CIA-RDP86-00513R000103**

MITTELMAN, A.; BALANEANU, M.

Internal reserves of increasing the light industry production.  
Probleme econ 16 no.8:160 Ag'63.

1. Director, Intrepriderea "Teba" (for Mittelman). 2. Inginer  
Sef, Intreprinderea "Teba", Arad (for Balaneanu).

BALANESCU, Ciprian, ing.; CATUNEANU, Vasile, M., conf. ing., candidat in  
stiinta tehnice.

Equipment for selecting cores of ferrite in operating conditions  
and for testing commutation magnetic circuits. Telecomunicatii  
7 no. 5:199-205 8-0'63

VOICULESCU, A.; BAIANESCU, Fl.

Circulatory and respiratory adaptation in arterial hypertension.  
Fiziol. norm. pat. 11 no.2:143-152 Mr-Apr '65.

1. Institutul de expertiza medicala si recuperarea capacitati de  
munca.



STEINBACH, M.; IAZAROVICI, N. I. M.; ILE, C.; POBORAN, A.; NEDULESCU, Raisa;  
CRAESCU, I.; BALANESCU, G.

Physico-chemical composition, fatty acid content and therapeutic  
value of some vegetable oils, fish oils and marine mammal oils  
of our country. Stud. cercet. med. intern. 5 no. 5:555-566 '64

1. Institutul de medicina interna al Academiei R. publice Populare  
Romane si Ministerul Sanatatii si Prevederilor Sociale (for  
Steinbach, Iazarovici). 2. Institutul de cercetari alimentare al  
Ministerului Industriei Alimentare (for Ile, Poboran, Nedulescu,  
Craescu, Balanescu).

BALANESCU, Gr., dr.

Ultrasound and its application in the food industry. Ind alim  
veget 13 no.2:38-44 F '62.

1. Institutul de cercetari alimentare.

BALANESCU, I.

W Welding in the construction of roller bridges. METALURGIA SI CONSTRUCTIA  
DE MASINI (Metallurgy and Machine Construction. ) 2:8Feb 55

BA LA NESCU , 1.

The 5-ton portal crane. p. 298.

METALURGIA SI CONSTRUCTIA DE MASINI. (Ministerul Industrial Metalurgice  
si Constructiilor de Masini si Asociatia Stiintifica a Inginerilor si  
Technicienilor di Romina.) Bucuresti, Rumania; Vol. 11, no. 4, Apr. 1959

Monthly List of East European Accessions (EEAI) LC Vol. 8, no. 9, <sup>Sept.</sup> 1959

Uncl.

BALANESCU, I.

Development of cast-iron type metallic constructions for traveling cranes.  
p.591.

METALURGIA SI CONSTRUCTIA DE MASINI. (Ministerul Industrii Metalurgice  
si Constructiilor de Masini si Asociatia Stiintifica a Inginerilor si  
Tehnicienilor din Romania) Bucuresti, Romania  
Vol. 11, no.7, July 1959

Monthly List of East European Accessions (EEAI) IC, Vol. 9, no. 2 Feb. 1960

Uncl.

HALANECHU, I.; NICULESCU, P.; PURNIANA, L.

Effect of Antibiotics upon thrombin. p. 265. COMUNICARILE. Bucuresti.  
Vol. 5, no. 1, Jan. 1955

Source: East European Accessions List, (EEAL), 1c, Vol. 5, No. 3, March 1956

BALANESCU, I.; NICULESCU, P.; BURUIANA, L.

Effect of tissual extracts of animal origin (extracts of placenta and of vitreous humor of Bovidae) upon the germinations of corn and the activity of phosphatase and pectase during germinations. p. 1065.

Academia Republicii Populare Romane. COMUNICATIE.  
Bucuresti.

Vol. 5, no. 7, July 1955

SOURCE: East European Accessions List (EEAL) Library of Congress.  
Vol. 5, No. 12, December 1956

R/009/60/000/010/005/009  
A125/A126

AUTHOR: Bălănescu, I., Engineer

TITLE: Modernization of a sheet metal planer

PERIODICAL: Metalurgia și Construcția de Mașini, no. 10, 1960, 883 - 884

TEXT: The article reviews the modernization of a sheet metal planer having the following characteristics: thickness of the sheet, maximum 40 mm, cutting speed, 2.5 m/min; fastening of the sheet by hand driven screws; individual drive by an electric motor through two belts and an intermediary shaft; mechanical reversion by successive driving of the planer disc. The modernization principles were: mechanization of the sheet fastening system, accomplishment of a higher speed range, elimination of the belt transmission, and electric reversion. The sheet is now fastened by 8 pneumatic cylinders with a double action of 220 mm, developing a power of 2,000 kg and 6 atm. The electric motor has been coupled by a pinion to the gear of the planer's driving shaft. An "M-71-10" electric motor has been used with 600 rpm, 11 kg at 40% ED and two shaft ends. By introducing a resistance into the circuit, the revolution of the motor became variable between 360

Card 1/2



Modernization of a sheet metal planer

R/009/60/000/010/005/009  
A125/A126

and 600 rpm. A pinion which drives the gear of the planer shaft is mounted on one end of the motor shaft. On the other end there is a brake disc assembled, which is provided with magnetically controlled brake shoes, 300 mm in diameter. The brake stops the motion of the planer within 1 - 2 sec. The motor is installed on a frame made of U 20 rolled steel. The reversion of the electric motor is accomplished by reversing two phases with two CD and CS contactors, controlled by the hub limits. An RT timing relay was installed into the control circuit, for the braking time has exceeded the coupling time of the reversing contact. In case of high-speed operation, the motor resistance is shortened by a CRS switch. The electric control is accomplished by a box equipped with three BF 6 buttons, two of which are used for the reversing operation and one for the stopping. To facilitate the operation, 4 button boxes are installed on the planer. The motor is protected by fuses as well as thermal and electromagnetic relays. There are 2 figures and 1 table.

Card 2/2

BALANESCU, I.

"Complex mechanization and automation in the construction of machines and apparatus" by A.N. Rabinovici. Reviewed by I. Balanescu. Constr. mas 15 no.4:341 Ap '63.

BALANESCU, Ion, ing.

New trends in crane construction. Metalurgia constr mas 8 no.11:  
967-974 N '61.

(Cranes, derricks, etc.)

BALANESCU, Ion

Tolerances regarding the traveling crane tracks. Metalurgia  
constr mas 14 no.7:635-638 J1 '62.

1. Uzina de utilaj chimio, Bucuresti.

BALANESCU, Ion, ing.

A new laboratory for welding control. Metalurgia si constr  
mas 15 no.3:264-267 Mr '63.

1. Uzina Vulcan, Bucuresti.

BALANESCU, I.

"Atlas of lines of force in machine parts" by W. Kloth.  
Reviewed by I. Balanescu. Constr mas 15 no.5:410 My '63.

BALANESCU, I.

"Album for welding auxiliary equipment" by L.V. Emelianov,  
L.A. Jivotinski, A.D. Gitlevici. Reviewed by I. Balanescu.  
Constr mas 15 no.5:409 My '63.

BALANESCU, I.

"Special cranes for assembling thermoelectric power stations"  
by A.S. Prosin. Reviewed by I. Balanescu. Metalurgia si constr  
mas 15 no.3:280-281 Mr '63.



BALANESCU, I.

"Speed reducing and speed change gears" by B. Horovits. Reviewed  
by I. Balanescu. Constr mas 15 no.6:471 Je '63.

BALANESCU, I.

"Cold bending of tubes; methods and machines" by D.F.Wolf.  
Reviewed by I.Balanescu. Constr mas 15 no.7: 538 J1'63.

"New methods of metallic coverings" by I.Teindl. Reviewed  
by I.Balanescu. 538

BALANESCU, I.

"Hoisting and transporting machine assembling" by M. Baliev,  
G. Zelianok, A.V. Kovtunov. Reviewed by I. Balanescu.  
Constr mas 15 no. 8:604-605 Ag'63

"Values of the distortion in rigidified right-angled plates"  
by Klopel, Schoer. Reviewed by I. Balanescu. 605.

BALANESCU, I.

"Conduits in the chemical industry" by E.A. Ivanov, A.V. Sepelev, E.V. Lialin. Reviewed by I. Balanescu. Constr mas 15 no. 9:667 S '63.

"Hydraulics in industrial workshops" by H. Kirchbach. Reviewed by I. Balanescu. Ibid.:667-668.

BALANESCU, Ion

New constructive solution in the field of portal cranes. Constr  
mas 16 no.4:200-207 Ap'64

BALANESCU, I.

"Form and calculation of welded constructions" by A. Erker,  
A.W. Hermser, A. Stall. Reviewed by I. Balanescu. Constr mas  
16 no.7:401 J1 '64.

BALANESCU, Ion

A new stand for reducer testing and run-in. Constr nos 17  
no.1,22-26 Ja '65.

BALANESCU, I. N., conf. univ.

Some philosophical aspects of cybernetics. St si Teh Buc 13 no.7:38-39  
J1 '61.



BALANESCU, I. N.  
SURNAME (in caps); Given Names

Country: Rumania

Academic Degrees: 2Conf. Univ.-

Affiliation: -not given-

Source: Bucharest, Stiinta si Tehnica, No 7, Jul 1961, pp 38-39.

Data: "Some Philosophical Aspects of Cybernetics."

BALANESCU, Ion N.  
SURNAME, Given Names

Country: Rumania

Academic Degrees: -Conf. Univ.-

Affiliation: -not given-

Source: Bucharest, Stiinta si Tehnica, No 8, Aug 1961, pp 28-29, 43.

Data: "Some Philosophical Aspects of Cybernetics."

GPO 981643

BALANESCU, I.N.; MOSCU, I.

Contributions to the study of fatigue in industrial labor  
through studies of physical states. Rsv psihologie 9 no.1:  
7-36 '63.

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Some problems of the hypnotic phases and the law of force.  
Rev psihologic 9 no.1:77-114 '63.

BALANESCU, I.N.; MOSCU, I.; GHEORGHIU, V.; MINZAT, I.; VRANCEANU, M.

Studies on the motor reaction to the action of words during  
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BALANESCU, I.N.; IANCU, I.; PUFAN, C.; POINESCU, I.; GOLU, M.; GAZDARU, A.; CONSTANTINESCU, P.

Contributions to the study of the world of the young generation.  
Rev psihologie 11 no.1:5-21 '65.

1. Chair of Psychology of the University of Bucharest. Submitted August 12, 1964.

MULLER, Oscar.: BALANESCU, I.V.

Tomographical data on the relation between tuberculosis in  
children and in adults. Bul. stiint., sect. med. 7 no.2:469-485  
Apr-June 55.

(TUBERCULOSIS PULMONARY, diagnosis  
tomography, comparative study of adults & child)  
(ROENTGENOGRAPHY  
tomography in tuberc., pulm., in adults & child)

VLADescu, R.; BALANESCU, I. V.

Study of phosphatases in tuberculosis. Probl. ter., Bucur.  
3:111-115 1956.

(TUBERCULOSIS PULMONARY, blood in  
phosphatase, acid & alkaline, diag. & progn. value of  
determ.)

(PHOSPHATASES, in blood  
acid & alkaline, in pulm. tuberc., diag. & progn. value  
of determ.)



OERIU, S.; BALANESCU, I. V.; BURUIANA, L.; HADARAG, M.; NICULESCU, P.

Effect of sodium salicylate on testicular hyaluronidase;  
preliminary note. Probl. ter., Bucur. 3:139-145 1956.

1. Membru corespondent al academiei R.P.R. (for Oeriu)

(TESTES, metabolism

hyaluronidase, in extracts of bovine testis, eff.  
of sodium salicylate in various concentrations in  
substrata of varying pH)

(HYALURONIDASE, metabolism

in extracts of bovine testis, eff. of sodium salicylate  
in various concentrations in substrata of varying pH)

BALANESCU, I.V.

RUMANIA/Pharmacology. Toxicology. Antibiotics.

V

Abs Jour: Ref. Zhur. - Biol., No. 22, 1958, 102953

Author : Oeriu, S.; Balanescu, I.V.; Buruiana, L.;  
Hadarag, El.; Niculescu, P.

Inst : -

Title : The Effect of Some Antibiotics and Synthetic  
Chemical Substances on Hyaluronidase and  
Hyaluronic Acid.

Orig Pub: Probl. terap., 1956, 3, 159-172

Abstract: The influence of streptomycin, preparation I<sub>2</sub>  
(sulfosalicylate-allylthiocyanate-streptomycin),  
pencillin as well as PAS, sulfosalicylic and  
salicylic acids on the system of hyaluronidase  
(I) - hyaluronic acid (II) was studied. All  
these substances activate the I-II system.  
Pencillin stimulates it in small concentrations

Card 1/2

RUMANIA/Pharmacology. Toxicology. Antibiotics.

V

Abs Jour: Ref. Zhur. - Biol., 22, 1958, 102953

(1-100 units per 1 ml), inhibits it in larger (500-1000 units per 1 ml). Fermentative depolymerization of II under the influence of I takes place slowly in vitro, and depolymerization, induced by the above-mentioned means, takes place quickly. The speed of depolymerization depends on the dose. Sodium sulfosalicylate acts strongest of all and particularly so the preparation I<sub>2</sub>. This corresponds well with the great speed of I<sub>2</sub> penetration into the tissues (into the liquor in experiments on dogs and in the clinic) established previously. Bibl. 16 items.-  
A. G. Brusilovskaya

Card 2/2

35

VLADIMIR, Radn, academician; BAIANESCU, I.V.; GERANIU, R.

Physico-chemical constants of the blood in experimental and human tuberculosis. Probl.ter., Bucur. 10 no.4:83-92 '60.  
(TUBERCULOSIS, blood)

BALANESCU, I.V.; TANASE, I.; GEORGESCU, C.

Contribution to the study of pyruvic and  $\alpha$ -ketoglutaric acids  
in experimental and human tuberculosis. Stud. cercet. med. intern.  
2 no.2;259-263 '61.

(TUBERCULOSIS, PULMONARY blood) (PYRUVATES blood)  
(KETO ACIDS blood)

ALANESCU, H.

Construction of a dam for supplying water to a thermoelectric-power station. p.583

INDUSTRIA CONSTRUCTILOR SI A MATERIALELOR DE CONSTRUCTII, Bucuresti, Vol 6, No. 11,  
Nov., 1955

SO: East European Accessions List (EEAL) Library of Congress, Vol 5, No. 7, July, 1956

BALANESCU, Mihai, ing.

Motorcar, boat, and airplane transportation during the first years of the six-year plan. Rev transport ll no. 1: 1-6 Ja '64.

1. Adjunct al Ministrului Transporturilor si Telecomunicatiilor.

ACCESSION NR. AP4034906

S/0181/64/006/005/1311/1313

AUTHOR: Berger, L. I.; Balanevskaya, A. E.

TITLE: Heat expansion, thermal conductivity, and modulus of elasticity of certain ternary semiconductor compounds of the  $A_2BIVC_{VI}$  type

SOURCE: Fizika tverdogo tela, v. 6, no. 5, 1964, 1311-1313

TOPIC TAGS: Cu sub 2 GeS sub 3, Cu sub 2 SnS sub 3, Cu sub 2 GeSe sub 3, Cu sub 2 Sn Se sub 3, thermal expansion coefficient, thermal conductivity, ultrasound propagation velocity, modulus of elasticity

ABSTRACT: The linear coefficient of thermal expansion, the thermal conductivity of and the propagation velocity of ultrasound in specimens of  $Cu_2GeS_3$ ,  $Cu_2SnS_3$ ,  $Cu_2GeSe_3$ , and  $Cu_2SnSe_3$  have been measured at near room temperature. The expansion coefficient ( $\alpha$ ) was measured for polycrystalline cylindrical specimens with the use of equipment described by L. I. Berger (Authors' Certificate No. 155974, 1963).

Card 1/3



ACCESSION NR. AP4034906

The propagation velocity ( $v$ ) of longitudinal ultrasound waves was measured with an UZD-1M instrument at frequencies of 2.5 and 5.0 Mc. The densities ( $\rho$ ) of the individual substances necessary for determining the moduli of elasticity ( $E$ ) were taken from a study by L. S. Palatnik et al (Kristallografiya, v. 6, p. 960, 1961). The thermal conductivity ( $\chi$ ) of the crystalline lattice was measured with equipment recommended by A. F. Ioffe (Fizika poluprovodnikov, p. 412, Ed. House of the AS USSR, M-L, 1957). The results of the experiments are

given in a table and plotted as  $\chi$  versus  $\frac{T_s}{M}$ ,  $a$  versus  $\frac{M}{T_s}$ , and  $\frac{E}{\rho}$  versus  $\frac{T_s}{M}$  curves, where  $M$  is the molecular weight and  $T_s$  the melting point. The results obtained were used to verify the theoretical

relationships  $\frac{1}{\chi} \sim a^2$ ,  $\chi \sim \left(\frac{T_s}{M}\right)^{1/2}$ ,  $a \sim \left(\frac{T_s}{M}\right)^{-1/4}$ , and  $E \sim \rho \frac{T_s}{M}$  established by T. A. Kantorova (Zh T F, 26, 2021, 1956) and L. I. Berger (Sb. "Voprosy metallurgii i metallovedeniya," p. 157, Metallurgizdat,

Cord 2/3

ACCESSION NR. AP4034906

M, 1962). The theoretical data and experimental results were found to be in a good agreement. It is concluded that the above formulas hold true both for simple compounds and for more complex binary and ternary compounds, provided that the nature of the atomic interaction forces for individual substances differs but little. Orig. art. has: 3 figures and 1 table.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv, Moscow (All-Union Scientific Research Institute of Chemical Reagents and Extra-Pure Chemical Substances)

SUBMITTED: 21Oct63

DATE ACQ: 20May64

ENCL: 00

SUB CODE: CH,PH

NO. REF. SOV: 009

OTHER: 000

Cord 3/3

- 10 (24) -

BALANEVSKAYA, A.E.; BERGER, L.I.; PECHENNIKOV, A.V.; CHECHERNIKOV, V.I.

Magnetic properties of a series of ternary semiconductor compounds of the  $A^I B^{III} C^{VI}$  type with chalcopyrite structure. Izv. AN SSSR. Neorg. mat. <sup>1</sup>1 no.12:2165-2166 D '65.

(MIRA 18:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut khimicheskikh reaktivov i osobo chistykh khimicheskikh veshchestv. Submitted July 8, 1965.

BALANICA, T.

"Book on forestry: a review". p. 184, (REVISTA PADURILOR, Vol. 69,  
No. 4, Apr. 1954, Bucuresi, Rumania)

SO: Monthly List of East European Accessions, (EEAL), LC, Vol. 3,  
No. 12, Dec. 1954, Uncl.

TRAIAN, T.

"Present position and prospects for development of forest meteorology in the light of Soviet research", p. 141, (REVISTA PADURILOR, Vol. 69, No. 10, Oct. 1984, Bucuresti, Romania)

See: Monthly List of East European Accessions, (EMEA), LC, Vol. 4, No. 4, April 1985, Uncl.

BALANICA, T.

The Institute for Research on the Mechanization of Silvicultural Work and Forest Exploitation. p. 345. REVISTA PADURILOR. (Asociatia Stiintifica a Inginerilor si Tehnicienilor din Romania si al Ministerului Agriculturii si Silviculturii) Bucuresti. (Journal on forestry issued by the Scientific Association of Engineers and Technicians of Rumania and the Ministry of Agriculture and Forestry; with Russian summaries. Monthly) Vol. 70(i.e. 71), no. 6, June, 1956.

SOURCE:

East European Accessions List, (EEAL) Library of Congress, Vol. 5, no. 11, November, 1956.

BALANICA, T.

Meteorologic documentation of silviculturists. p. 275.

REVISTA PADURILOR

Vol. 71, no. 5, May 1956

Romania

Source: EAST EUROPEAN LISTS Vol. 5, no. 10 Oct. 1956

BALANICA, T.

Rumanian forestry science.

p. 557 (Revista Padurilor) Vol. 71, no. 9, Sept. 1957, Bucuresti, Rumania

SO: MONTHLY INDEX OF EAST EUROPEAN ACCESSIONS (EEAI) LC, VOL. 7, NO. 1, JAN. 1958



ROMANIA / Soil Science. Physical and Chemical Properties of Soils.

Abs Jour: Ref Zhur-Biol., No 21, 1958, 95691.

Author : Balanica, T.

Inst : Experiment Stations of the Scientific Research Forest Institute (Snagov and Baragan).

Title : Temperature Changes in the Soil in 1956 on the Experiment Stations of the Scientific-Research Forest Institute (Snagov and Baragan).

Orig Pub: Rev. padurilor, 1957, 71, No 12, 756-760.

Abstract: Features are described of the microclimate of soils on the experiment stations in the region of Baragan in the southwestern part of the Kamorey Valley and in Snagov in the open plain (RPR).

Card 1/1

BORODZYUK, G.G.; STEPANOV, G.N.; DRIATSKIY, N.M.; IONTOV, L.Ye.; KOVALEV, S.M.; BLOKHIN, A.S.; DVORTSOV, L.D.; LUGOVSKIY, N.Ye.; MERKULOV, A.G.; SMIRNOV, B.P.; ROGINSKIY, E.M.; BALAN-IL'YEVSKAYA, I.A.; IZRAILIT, S.G.; GRANAT, M.B.; ZARIN, S.A., otv.red.; FEDOROVSKAYA, L.N., red.; MARKOCH, X.G., tekhn.red.

[Multichannel apparatus for high-voltage telephony on overhead lines and cables] Mnogokanal'naya apparatura vysokochastotnogo telefonirovaniya po vozdushnym i kabel'nym liniyam svyazi. Moskva, Gos.izd-vo lit-ry po voprosam svyazi i radio, 1959. 511 p.

(MIRA 14:1)

(Telephone--Equipment and supplies)

3(9)

AUTHOR: Balanin, A. S.

SOV/50-59-10-13/25

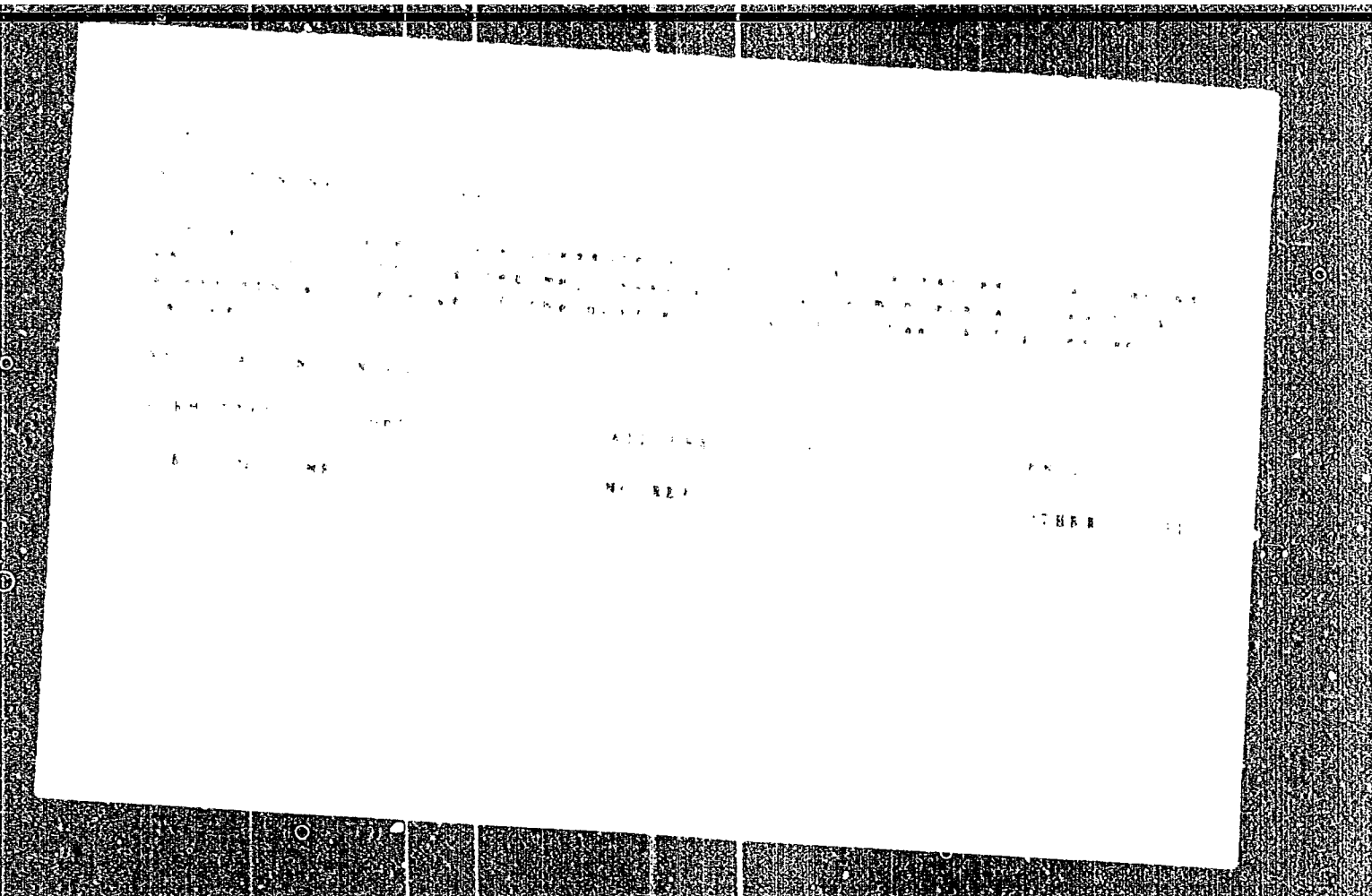
TITLE: Observations of the Wave Elements at Night

PERIODICAL: Meteorologiya i gidrologiya, 1959, Nr 10, p 34 (USSR)

ABSTRACT: The Hydrometeorological Marine Station of Yalta made observations of the sea at night at two places. Wave-gauge perspectographs were placed 10 and 40 m above sea level, by means of which the floating of buoys was observed which had been anchored at a distance of 300 and 740 m and were floodlighted. The floodlights moved horizontally and vertically. The observations covered the kind and form of motion of the sea, the direction of wave propagation, wavelength, and wave period. Only the length and velocity of high waves can be determined. The Station further observes the development and attenuation of storms. The development of sea motion is usually observed as soon as the waves have attained a height of 0.5 m with simultaneous measurement of the velocity and direction of the wind.

Card 1/1

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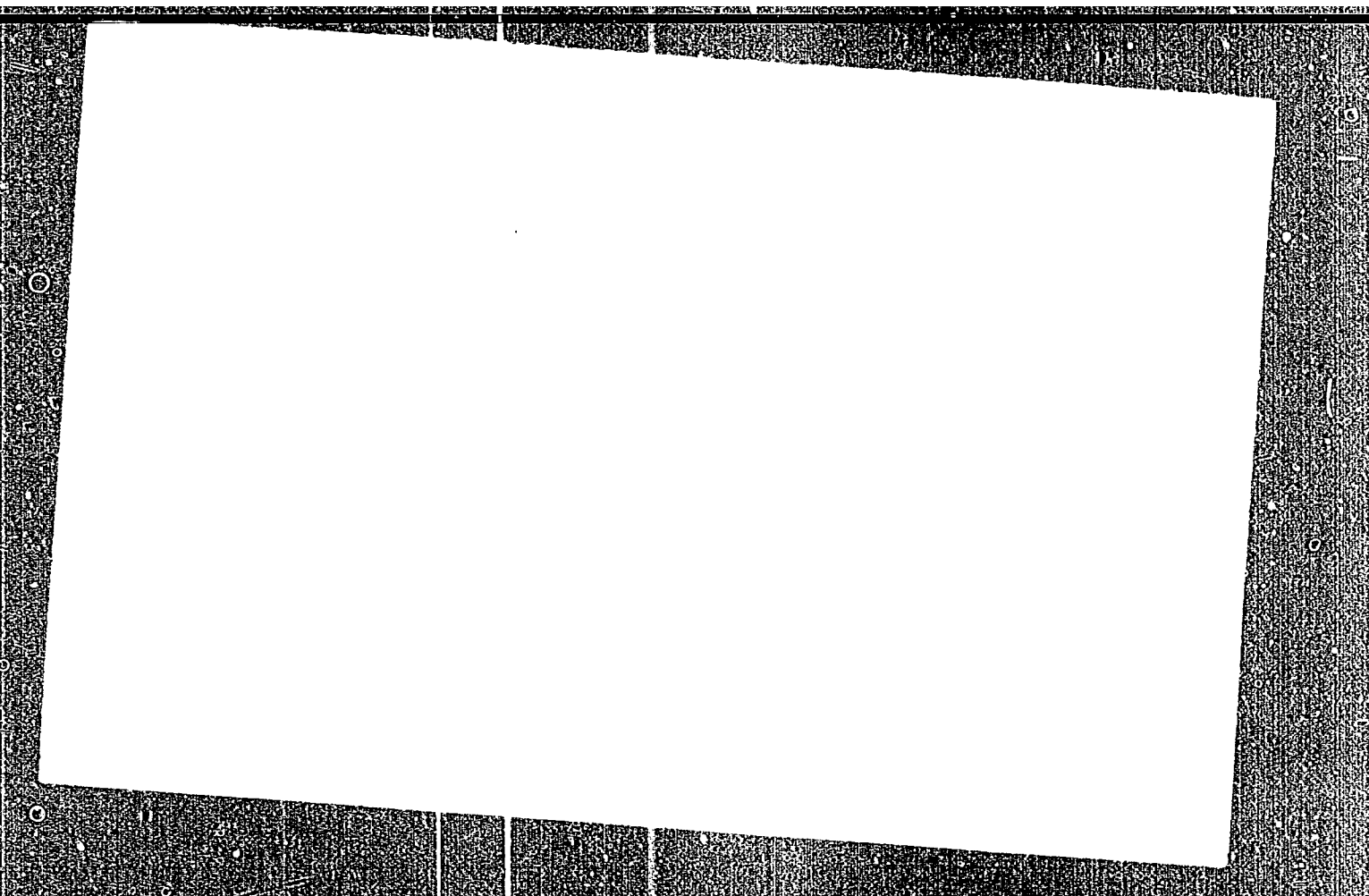


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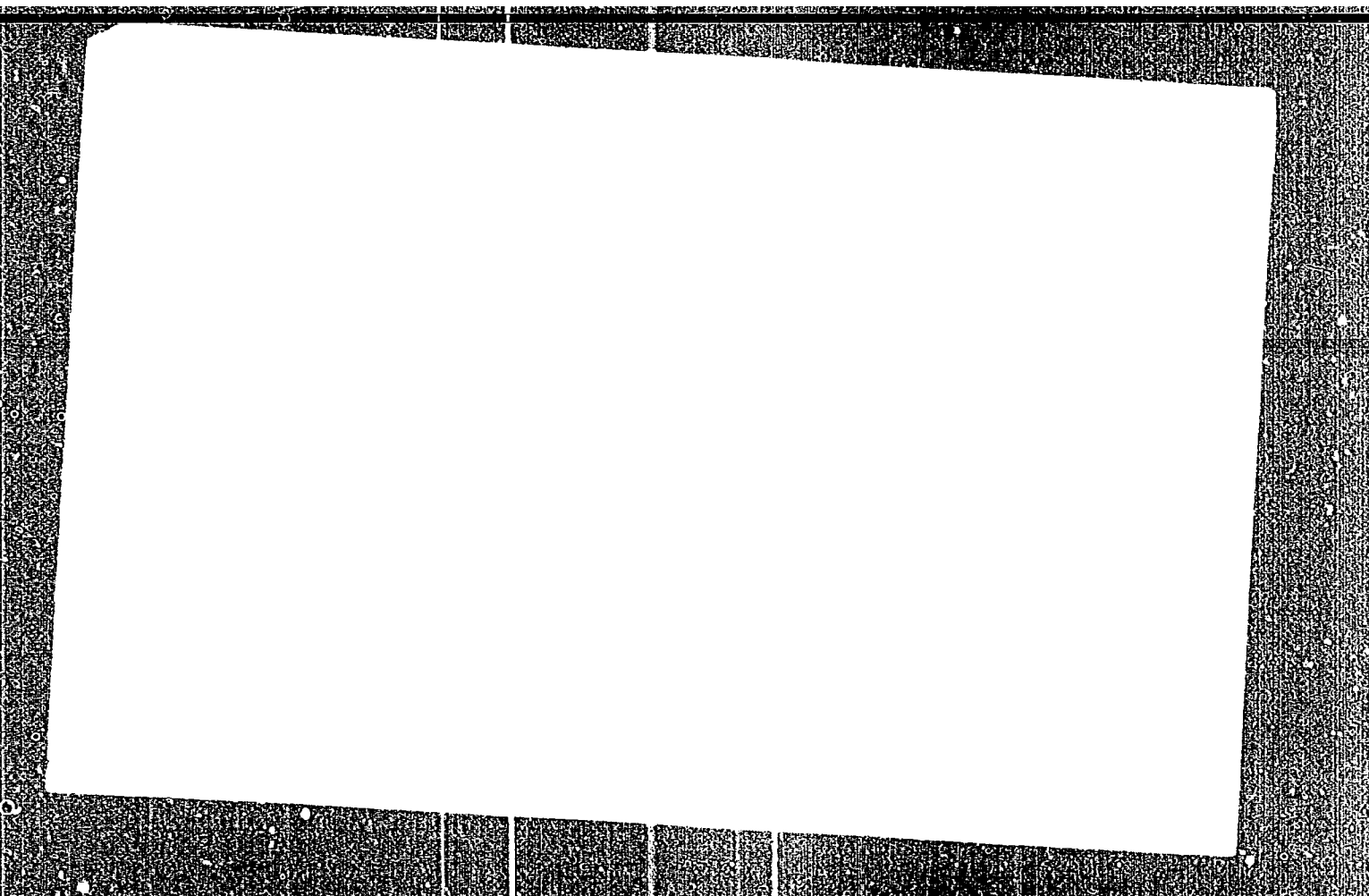


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CIA-RDP86-00513R000103



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CIA-RDP86-00513R000103

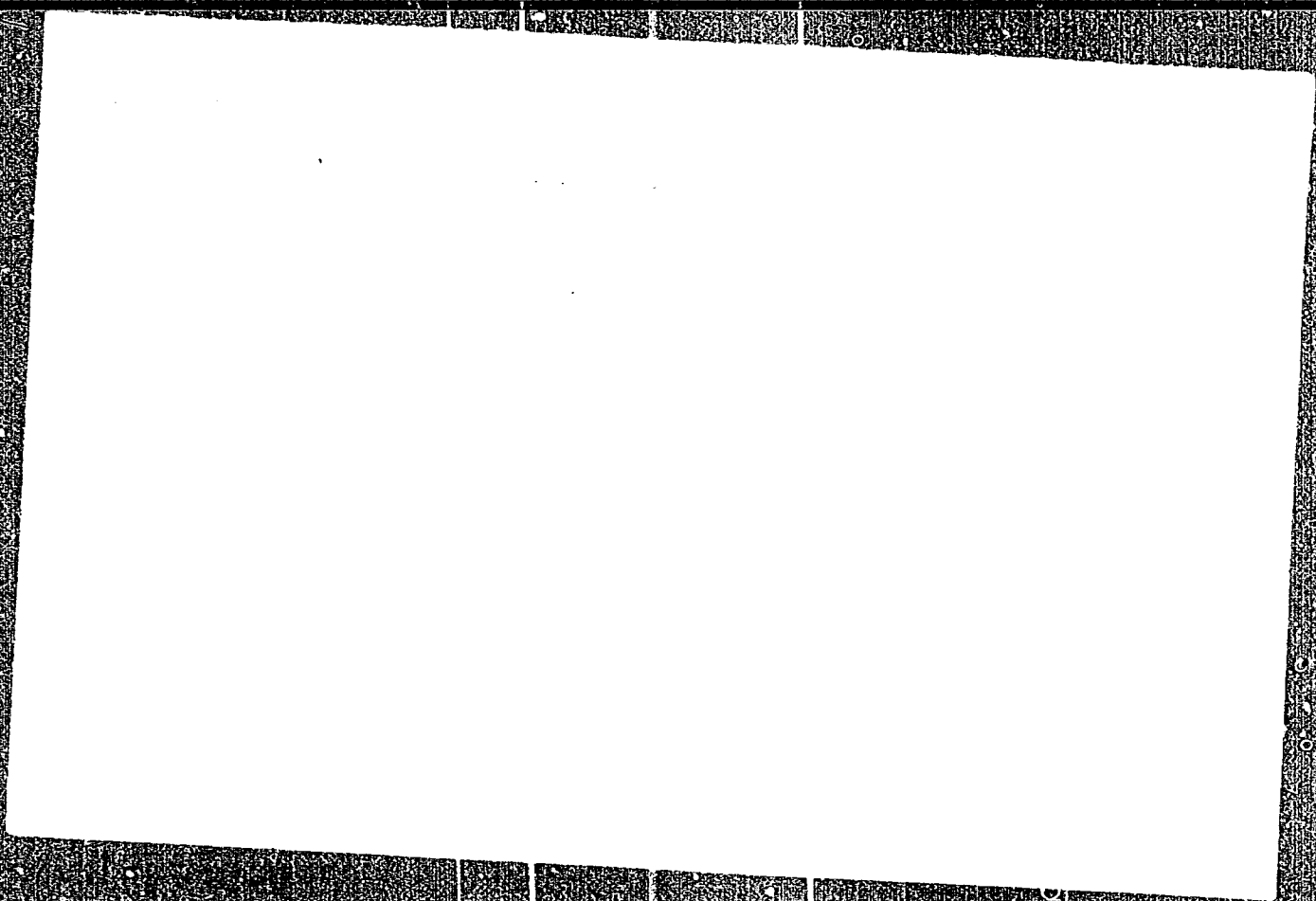


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SOURCE: Leningrad, Universitet, Vestnik, Seriya matematiki, mekhaniki i astro-  
nomii, no. 2, 1965, 157-159

"APPROVED FOR RELEASE: Wednesday, June 21, 2000

CIA-RDP86-00513R000103

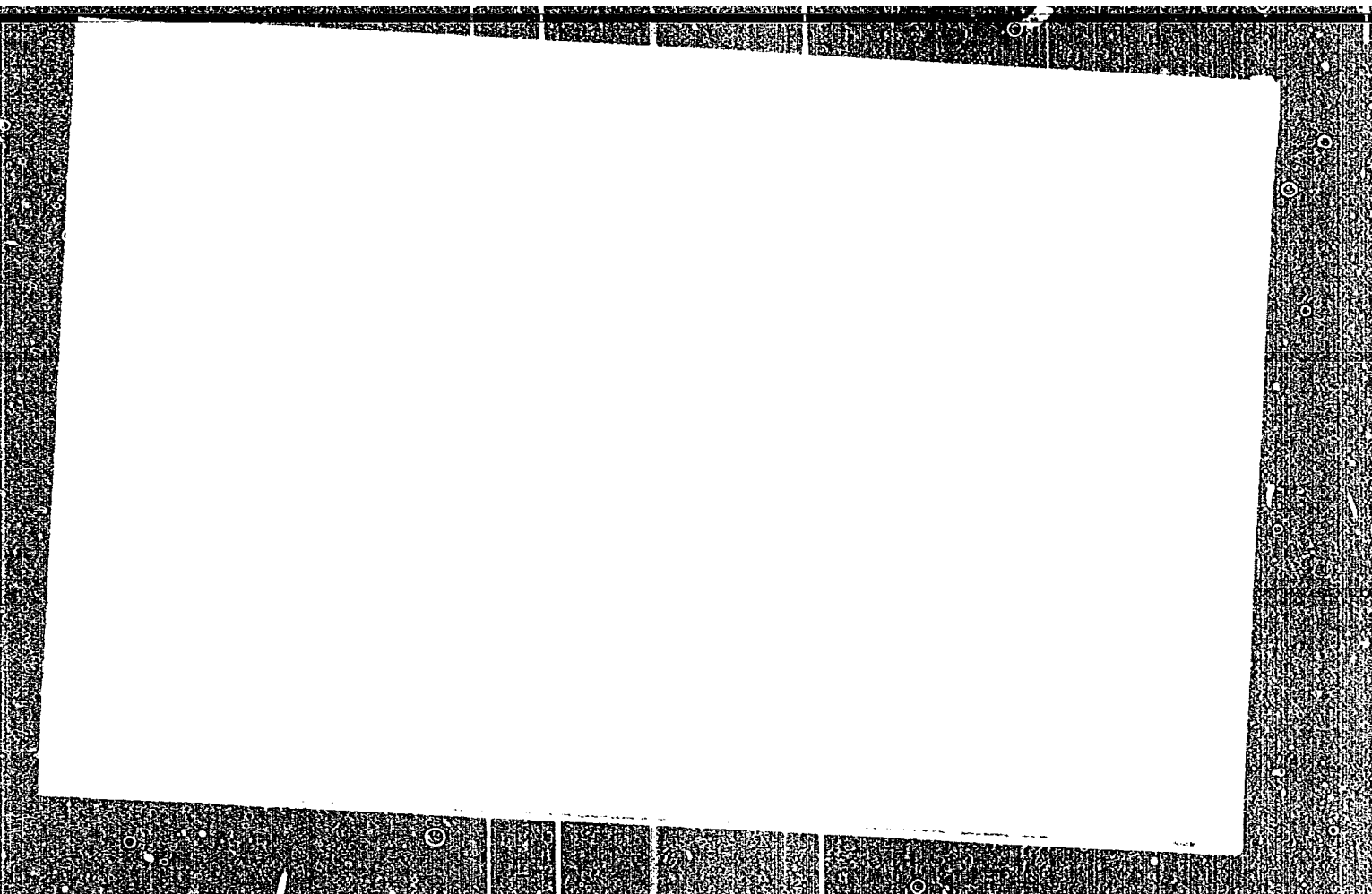


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